

This enormous increase, in spite of lessened albuminoids and larger percentages of fibre, means that some tons per acre of digestible food is stored up in the corn plant during the last stages of its growth, and points undoubtedly and emphatically to the time for harvesting the fodder.

2. The decreased percentage of ash in the dry matter as the corn arrives at maturity shows that it is the young plant more particularly that absorbs the mineral constituents from the soil, and the same is no doubt true, though not to the same extent perhaps, as regards its nitrogen. This clearly advises that the previous tillage of the soil should be thorough, and that during the early part of the season especially should the corn be well cultivated and kept free from weeds.

3. Attention has been called to the fact that the albuminoids decrease as the plant matures. This is, perhaps, but partially correct. The albuminoids are calculated by multiplying the total amount of nitrogen found by 6.25—as one part of nitrogen is equivalent to 6.25 parts of albuminoids. Now, as some of this nitrogen, more particularly in the young plant, exists in the condition of amides, it would be more accurate to state that the amount of nitrogen decreases during mature growth. It is considered that the nitrogen of the amides in the young plants is transformed into that of the more valuable albuminoids as ripeness approaches. Therefore, though the maturer plant may contain the less nitrogen, the loss may be more than compensated for in the increased percentage of true albuminoids. It is, therefore, the wisest policy to allow the corn to reach the glazed condition, especially when we remember the tremendous increase of dry matter, of which the albuminoids form a part, as the plant approaches maturity.

4. Fibre may be regarded as the framework of the plant, supporting the more tender tissues, and carrying by means of its tubes and vessels the nourishment elaborated by the roots and leaves. After it has been allowed to become dry and hard by over-ripeness, its digestibility is to a large degree impaired. Such change is usually accompanied by alteration in colour—the stem becoming yellow or brown. Want of light and room to grow often cause this discolouration prematurely.

Intimately connected with this matter of plant development is that of room—room for the roots and room for the stalks. For a rapid and generous growth of the plant, both are necessary. Plenty of loose soil is required for the roots and rootlets to pene-